

Table C-4. Areal coverage and relative abundance of principal plant associations of Steel Creek delta^a

Mapping unit	Symbol	Dominant flora	Area		
			Hectares	Acres	Percent
Scrub-shrub wetland	C	<u>Cephalanthus</u> - <u>Salix</u> (buttonbush-willow)	29	72	23.1
Emergent wetland (persistent)	P	<u>Leersia</u> (cut-grass)	22	55	17.7
Broad-leaved deciduous	S	<u>Salix</u> spp.	21	51	16.6
Broad-leaved deciduous forest	Qly	<u>Quercus lyrata</u> - <u>Carya</u> - <u>Nyssa</u> (overcup oak - water hickory - water tupelo)	17	42	13.5
Mixed scrub-shrub	C/N	<u>Cephalanthus/Polygonum</u> (buttonbush/Polygonum)	16	39	12.4
Mixed forested/scrub- shrub	T/C	<u>Taxodium/Cephalanthus</u> (bald cypress/buttonbush)	13	31	10.1
Broad-leaved deciduous forest	Q	<u>Quercus laurifolia</u> (laurel oak)	5	13	4.3
Emergent wetland	N	<u>Hydrolea</u> (hydrolea)	2	4	1.4
Rooted vascular	R	<u>Myriophyllum</u> (parrot- feather)	1	3	1.0
Total			126	310	100.1

^aAdapted from Smith et al. (1981).

Table C-5. Basal area of trees and shrubs of Steel Creek delta^a
 (In square meters per acre)

Species	Mapping unit ^b						
	P	C/N	C	S	T/C	T	Qly
Trees							
<u>Carya aquatica</u>							3.20
<u>Celtis leavigata</u>						0.36	1.54
<u>Cephalanthus occidentalis</u>		0.04		0.25			0.06
<u>Crataegus</u> spp.						0.02	
<u>Forestiera accuminata</u>						0.06	
<u>Fraxinus americana</u>			0.10			1.42	
<u>Fraxinus caroliniana</u>	0.17			0.93	0.51		1.42
<u>Ilex opaca</u>						0.56	0.01
<u>Liquidambar styraciflua</u>	0.02						
<u>Nyssa aquatica</u>				0.69	11.37	4.09	
<u>Planera aquatica</u>	0.10			0.06	.27	0.51	0.03
<u>Platanus occidentalis</u>						1.36	
<u>Quercus laurifolia</u>	0.06			0.09			0.17
<u>Quercus lyrata</u>							2.41
<u>Quercus nigra</u>							4.66
<u>Salix</u> spp.	0.01		0.50	3.35			
<u>Taxodium distichum</u>		1.17			7.65	12.97	5.03
<u>Ulmus</u> spp.						0.05	0.01
Total	0.01	1.52	0.54	3.45	9.67	25.17	13.41
							13.51

Table C-5. Basal area of trees and shrubs of Steel Creek delta^a (continued)
 (In square meters per acre)

Species	Mapping unit ^b							
	P	C/N	C	S	T/C	T	Qly	Q
Shrubs								
<u>Amelopsis arborea</u>			0.03					
<u>Cephalanthus occidentalis</u>			0.15		0.07			
<u>Fraxinus caroliniana</u>					0.09			
<u>Ilex decidua</u>							0.02	
<u>Salix spp.</u>			0.23					
Total	0.0	0.0	0.41	0.0	0.16	0.0	0.0	0.02
Total basal area	0.01	1.52	0.95	3.45	9.83	25.17	13.41	13.53
Number of quadrants	3	3	8	3	5	3	3	3

^aAdapted from Smith et al. (1981).

^bSymbols of the palustrine system--aquatic bed: P = persistent (Myriophyllum brasiliense); scrub-shrub wetland: C/N = mixed scrub-shrub/nonpersistent emergent (Cephalanthus occidentalis/Polygonum spp.); C = broad-leaved deciduous (Cephalanthus occidentalis - Salix nigra) nonpersistent; forested wetland: S = broad-leaved deciduous (Salix spp.), T/C = mixed forested/scrub-shrub (Taxodium distichum/Cephalanthus occidentalis), T = mixed deciduous (Taxodium distichum-Nyssa aquatica), Qly = broad-leaved deciduous (Quercus lyrata - Carya aquatica - Nyssa aquatica), Q = broad-leaved deciduous (Quercus laurifolia).

Table C-6. Occurrence and biomass of herbaceous species in the
Steel Creek delta, summer 1981^a
(In grams per square meter)

Species	Mapping unit ^b										
	R	N	P	C/N	C	S	T/C	T	Qly	Q	Mean
<u>Ampelopsis arborea</u>					3.82	0.14			0.04	0.28	0.84
<u>Aneilema keisak</u>	16.96	30.56	11.16	42.20	65.36						19.14
<u>Aplos americana</u>					7.40						0.33
<u>Aster sp.</u>	0.76				8.32						0.58
<u>Berchemia scandens</u>									2.52		0.25
<u>Bidens frondosa</u>					1.44	8.00					0.89
<u>Boehmeria cylindrica</u>		20.76			4.08	26.96	0.04	12.60	3.60		5.04
<u>Campsis radicans</u>									0.08		0.01
<u>Cephalanthus occidentalis</u>					0.04						0.01
<u>Ceratophyllum demersum</u>				11.28							1.13
<u>Cicuta maculata</u>	1.00				0.24			1.04			0.24
<u>Cyperus haspan</u>		3.18									0.32
<u>Echinodorus cordifolius</u>				6.72		0.92					0.73
<u>Galium tinctorium</u>		0.07	0.24		0.16	0.08					0.06
<u>Gelsemium sempervirens</u>									0.08		0.04
<u>Hydrocotyle sp.</u>					0.09						0.03
<u>Hydrolea quadrivalvis</u>	60.68	3.59	29.88	7.51	2.28	0.32					9.58
<u>Hypericum mutilum</u>		38.11			0.48	0.04					0.08
<u>Hypericum walteri</u>	2.56	22.28	19.36	18.96	7.12	6.20					8.56
<u>Ilex opaca</u>									0.08		0.01
<u>Itea virginica</u>									0.36		0.04
<u>Leersia spp.</u>	9.96	374.43	62.88	52.92	0.09	13.56					60.52
<u>Ludwigia palustris</u>	56.92	0.27	26.72	13.20	0.01						13.57
<u>Lycopus rubellus</u>					0.97						0.06
<u>Lycopus virginicus</u>					1.52	0.80					0.23
<u>Mikania scandens</u>				0.60	1.17	3.68		3.20			0.75
<u>Myriophyllum brasiliense</u>	31.68			38.80		4.28					7.48
<u>Onoclea sensibilis</u>					0.02	27.12			2.44		2.14

Table C-6. Occurrence and biomass of herbaceous species in the
Steel Creek delta, summer 1981^a (continued)
(In grams per square meter)

Species	Mapping unit ^b										Mean
	R	N	P	C/N	C	S	T/C	T	Qly	Q	
<u>Panicum agrostoides</u>					55.36	50.23					10.39
<u>Polygonum hydropiperoides</u>	356.08	271.72	52.02	105.56	29.24	9.68	34.60				86.21
<u>Polygonum</u> spp.					171.16	29.60					21.05
<u>Rhynchospora corniculata</u>					5.32	15.76	91.60				7.85
<u>Rubus</u> sp.										0.56	0.06
<u>Sagittaria latifolia</u>		144.84		50.97	37.92	42.30	16.80				28.65
<u>Salix</u> spp.							0.22				0.01
<u>Scirpus cyperinus</u>				176.76							
<u>Saururus cernus</u>						4.16			0.08		
<u>Scutellaria laterifolia</u>						1.08					0.06
<u>Smilax bona-nox</u>										3.68	0.37
<u>Smilax walteri</u>									0.32	16.48	1.68
Miscellaneous		0.88	4.99	0.12	1.24	5.33		8.28	0.08	0.16	1.96
Total	356.08	597.96	777.99	527.72	388.82	335.31	64.56	24.08	9.68	21.44	318.25

^aAdapted from Smith et al. (1981, 1982a). (See Figure C-4)

^bThe following are symbols of the palustrine system. Aquatic bed: R-rooted vascular (Myriophyllum brasiliense); emergent wetland: N = nonpersistent (Hydroclea quadrivalvis), P = persistent (Leersia spp.); scrub-shrub wetland: C/N = mixed scrub-shrub/nonpersistent emergent (Cephalanthus occidentalis/Polygonum spp.); C = broad-leaved deciduous (Cephalanthus occidentalis - Salix spp.); forested wetland: S = broad-leaved deciduous (Salix nigra), T/C = mixed forested/scrub-shrub (Taxodium distichum/Cephalanthus occidentalis), T = mixed deciduous (Taxodium distichum - Nyssa aquatica), Qly = broad-leaved deciduous (Quercus lyrata - Carya aquatica - Nyssa aquatica), Q = broad-leaved deciduous (Quercus laurifolia).